

REMARKS

This amendment is responsive to the Office Action of June 26, 2007. Reconsideration and allowance of claims 1-18 are requested.

The Office Action

Claims 1-5 and 8-12 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sweatt, et al. (U.S. PGPub. No. 6504943).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sweatt, in view of well known practices in the art.

Claim 7 is indicated as containing allowable subject matter.

The Present Application

The present application is directed to an optical analysis system for determining an amplitude of a principal component of an optical signal, the optical analysis system comprising a multivariate optical element (MOE) for weighing the optical signal by a spectral weighing function, and a detector for detecting the weighed optical signal. According to various claimed features, the MOE comprises a reflective component, such as a reflective liquid crystal (LC) cell or reflective electro-wetting cell, which can be manipulated to weight the optical signal before detection by a detector for analysis.

The References of Record

The Examiner rejects claims 1-5 and 8-12 under 35 U.S.C. 102(e) as being anticipated by Sweatt, et al. (6,504,943), and claim 6 under 35 U.S.C. 103(a) as being unpatentable over Sweatt in view of well known practices in the art. Sweatt relates to programmable multi-spectral filters for spectroscopic measurements and techniques for manipulating the data collected therefrom to identify scanned objects. The filter splits the light collected by an optical telescope into two channels for each of the pixels in a row in a scanned image, one channel to handle the positive elements of a spectral basis filter and one for the negative elements of the spectral basis filter. Contrary to the Examiner's assertions, Sweatt fails to describe each and every aspect set forth in the subject claims.

**The Claims Distinguish Patentably
Over the References of Record**

Independent claim 1 has been amended herein to set forth that the MOE includes at least one reflective LC cell, which aspect was previously set forth in dependent claim 6. The Examiner has rejected claim 6 as being taught by Sweatt in view of known practices in the art. Specifically, the Examiner asserts that the subject application “states that reflective LC cells are functionally equivalent to DMDs” citing two portions of the subject application relating to the use of the respective technologies. Contrary to the Examiner’s assertion, the subject application makes no such statement. Rather, the subject application describes two different embodiments that may be employed to achieve the desired optical analysis in a compact space. Moreover, the Examiner’s reliance on the applicant’s detailed description to determine “known practices in the art” is a textbook example of improper hindsight reasoning wherein an applicant’s patent application is used as a blueprint. The Examiner further argues that although Sweatt does not disclose using reflective LC cells, doing so would have been obvious since Sweatt uses a reflective DMD and since applicant’s disclosure, in alternate embodiments, sets forth using DMD or reflective LC cells. Again, such reliance on applicant’s disclosure to formulate an obviousness rejection is not permitted by the Patent Office.

Independent claim 7 (previously dependent from claim 1) has been rewritten in independent form to include the aspects of independent claim 1 and intervening dependent claims 2 and 3, in accordance with the Examiner’s indication that the subject matter of claim 7 is allowable.

Independent claim 12 has been amended herein to set forth that the multivariate optical element comprises a region for receiving a spectral portion of the dispersed optical signal, the region having a reflectivity relating to the spectral weighing function and at least one reflective electro-wetting cell. In view of the Examiner’s indication of allowability of the aspect of using an electro-wetting cell in the region for receiving a spectral portion of the dispersed optical signal, claim 12 is believed to be in condition for allowance.

In view of the foregoing, it is readily apparent that the subject claims 1-18 are neither anticipated by Sweatt, nor made obvious by the combination of Sweatt with known practices. Accordingly, withdrawal of these rejections is respectfully requested.

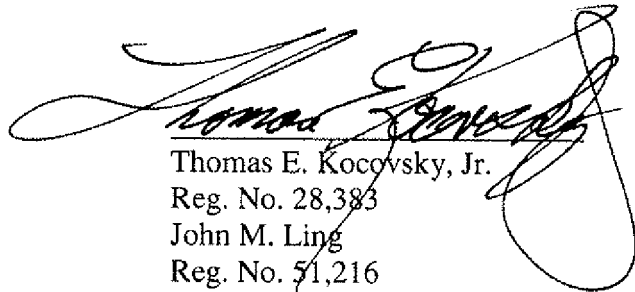
CONCLUSION

For the reasons set forth above, it is submitted that claims 1-18 (all claims) distinguish patentably over the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case(s), he is requested to telephone Thomas E. Kocovsky, Jr. at (216) 861-5582.

Respectfully submitted,

FAY SHARPE LLP

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and address.

Thomas E. Kocovsky, Jr.
Reg. No. 28,383
John M. Ling
Reg. No. 51,216
1100 Superior Avenue
Seventh Floor
Cleveland, OH 44114-2579
(216) 861-5582